

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 99.28**WELDING INSPECTION REPORT****Resident Engineer:**Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-018315**Date Inspected:** 23-Nov-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC) Chanxing Island**Location:** Shanghai, China**CWI Name:** Mr. Xu Tao**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG Bike Path**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance Inspector (QA), Vibin Kumar Selvanayaham, was present during the times noted above for observations relative to the work being performed.

Ultrasonic Testing (UT) – NWIT Document No: 007460

This QA inspector performed UT (after HSR) of approximately 10% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an UT report for this date. The members are identified as OBG Bike Path. The weld designations reviewed are as follows:

1. BK004A1-001-009
2. BK004A1-004-009
3. BK004A1-007-009

Ultrasonic Testing (UT) – NWIT Document No: 007457

This QA inspector performed UT of approximately 10% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an UT report for this date. The members are identified as OBG Segment. The weld designations reviewed are as follows:

1. SEG3013H-004, 006
2. SEG3013J-004

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3. SEG3013K-004, 006

Bay 19

This QA Inspector observed the following work in progress:

Flux Core Arc Welding (FCAW) repair welding of welds joint SB024-110-041 located on OBG Suspender Bracket SB110W. ZPMC Welder is identified as 062762. ZPMC Quality Control (QC) is identified as Mr. Xu Tao. The welding variables recorded by QC appeared to comply with the Applicable WPS-345-FCAW-1G (1F) - Repair, which is used as per Welding Repair Report (WRR) B-WWR-17503. See the attached picture.

Bay 14 – West Line

This QA Inspector observed the following work in progress:

Flux Core Arc Welding (FCAW) build-up welding of weld joint SP3126 located on OBG Segment. ZPMC Welder is identified as 054013. ZPMC Quality Control (QC) is identified as Mr. Xie Ming Feng. The welding variables recorded by QC appeared to comply with the Applicable WPS-345-SMAW-1G (1F) – FCM-Repair, which is used as per Welding Repair Report (WRR) B-WWR-16208. See the attached picture.

Flux Core Arc Welding (FCAW) welding of welds joint SEG3013A-009~015 located on side plate of OBG Segment 13AW. ZPMC Welders are identified as 047866 and 202122. ZPMC Quality Control (QC) is identified as Mr. Wang Xing Pin. The welding variables recorded by QC appeared to comply with the Applicable WPS -B-T-2232-ESAB.

FCAW welding of welds joint SEG3013M-220, 223 and 234 located on bottom plate stiffener of OBG Segment 13AW. ZPMC Welder is identified as 201215. ZPMC Quality Control (QC) is identified as Mr. Wang Xing Pin. The welding variables recorded by QC appeared to comply with the Applicable WPS -B-T-2233-Tc-U4b-F.

FCAW welding of welds joint SEG3013M-222, 221 and 226 located on bottom plate stiffener of OBG Segment 13AW. ZPMC Welder is identified as 069841. ZPMC Quality Control (QC) is identified as Mr. Wang Xing Pin. The welding variables recorded by QC appeared to comply with the Applicable WPS -B-T-2132.

FCAW welding of welds joint SEG3013N-092, 095, 1002 and 105 located on bottom plate stiffener of OBG Segment 13AW. ZPMC Welder is identified as 069089. ZPMC Quality Control (QC) is identified as Mr. Wang Xing Pin. The welding variables recorded by QC appeared to comply with the Applicable WPS -B-T-2233-Tc-U4b-F.

FCAW welding of welds joint SEG3013N-093, 094 and 098 located on bottom plate stiffener of OBG Segment 13AW. ZPMC Welder is identified as 069841. ZPMC Quality Control (QC) is identified as Mr. Wang Xing Pin. The welding variables recorded by QC appeared to comply with the Applicable WPS -B-T-2132.

Bay 14 – East Line

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This QA Inspector observed the following work in progress:

Flux Core Arc Welding (FCAW) welding of welds joint DP3087-001-070, 071 located on deck plate U-ribs of OBG Segment 13AE. ZPMC Welder is identified as 044790. ZPMC Quality Control (QC) is identified as Mr. Zhoug Guo Hui. The welding variables recorded by QC appeared to comply with the Applicable WPS -B-T-2133-ESAB.

FCAW welding of welds joint DP3093-001-046, 047 located on deck plate U-ribs of OBG Segment 13AE. ZPMC Welder is identified as 217805. ZPMC Quality Control (QC) is identified as Mr. Zhoug Guo Hui. The welding variables recorded by QC appeared to comply with the Applicable WPS -B-T-2132-ESAB.

FCAW welding of welds joint DP3104-001-085, 086 located on deck plate U-ribs of OBG Segment 13BE. ZPMC Welder is identified as 067949. ZPMC Quality Control (QC) is identified as Mr. Zhoug Guo Hui. The welding variables recorded by QC appeared to comply with the Applicable WPS -B-T-2133.

FCAW welding of welds joint DP3104-001-137, 138 located on deck plate U-ribs of OBG Segment 13BE. ZPMC Welder is identified as 066155. ZPMC Quality Control (QC) is identified as Mr. Zhoug Guo Hui. The welding variables recorded by QC appeared to comply with the Applicable WPS -B-T-2133.

FCAW welding of welds joint DP3104-001-202, 211 located on deck plate U-ribs of OBG Segment 13BE. ZPMC Welder is identified as 068501. ZPMC Quality Control (QC) is identified as Mr. Zhoug Guo Hui. The welding variables recorded by QC appeared to comply with the Applicable WPS -B-T-2133.

Visual Inspection after Blast

OBG Segment 12BW

This QA Inspector performed a preliminary random visual inspection on OBG Segment 12BW, after the grit blast of the interior components top side of the deck plates, floor beams, side plates and corner assemblies of this segment panel point PP113 to P115. Areas of visual weld defects that will require welding were taped and will be repaired after the coating is applied. ZPMC QC personnel are aware of these areas and were present during the inspection.

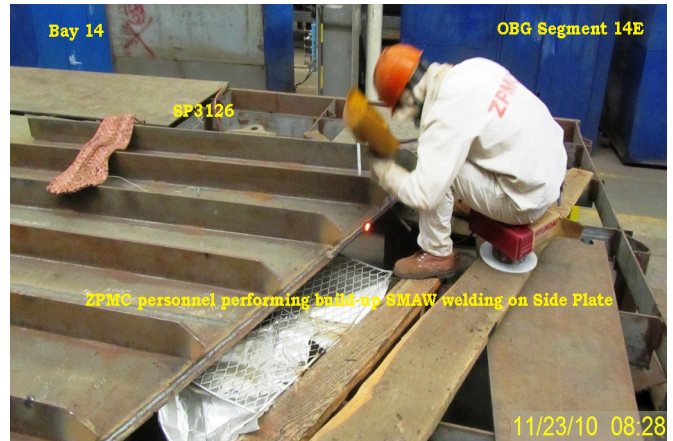
Unless otherwise noted, all work observed on this date appeared to be in general compliance with the applicable contract documents.

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## Summary of Conversations:

Only general conversation was held between QA and QC concerning this project.

## Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact , who represents the Office of Structural Materials for your project.

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**Inspected By:** Kumar,Vibin

Quality Assurance Inspector

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**Reviewed By:** Patel,Hiranch

QA Reviewer